



The European Biodiversity Observation Network and UN Sustainable Development Goals

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SUSTAINABLE DEVELOPMENT GOALS + biodiversity

15 LIFE ON LAND

14 LIFE BELOW WATER

6 CLEAN WATER AND SANITATION

2 NO HUNGER

Goal 15: protection, restoration and sustainable use of terrestrial ecosystems, sustainable management of forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

Goal 14, Target 14.2 and 14.5: sustainably manage and protect marine and coastal ecosystems, conserve at least 10 per cent of coastal and marine areas

Goal 6, Target 6.6: protect and restore water-related ecosystems

Goal 2, Targets 2.5: maintaining genetic diversity of seeds, plants and animals and their wild relatives

The EU BON approach

Biodiversity is globally still at risk and the **European Biodiversity Observation Network (EU BON)** addresses biodiversity-related issues on a European scale. A question of central concern is how data on biological diversity, such as on species state and trends, can be used for political processes and reporting (Wetzel et al. 2015), e.g. for tracking progress of Aichi targets, for the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and the UN Sustainable Development Goals (SDGs).

Biodiversity plays a key role in several of the SDGs, most importantly in Goal 15 that targets the protection, restoration and sustainable use of terrestrial ecosystems and calls for a halt of biodiversity loss - but also in other goals and SGD targets, such as on genetic diversity or the protection of water and marine related ecosystems.

Hence, there is an urgent demand to integrate, harmonize and standardize biodiversity information from on-ground to remote sensing data, in order to adequately provide evidence-based knowledge. The global framework for this task is set by the Global Earth Observation System of Systems (**GEOSS**) and its biodiversity section, the GEO Biodiversity Observation Network (**GEO BON**) – and **EU BON** as Europe's contribution towards these goals and initiatives.

EU BON builds on existing biodiversity information systems and infrastructures (e.g. GBIF, LifeWatch, LTER) thereby integrating access to multiple data sources (Hoffmann et al. 2014). It connects science, citizen science, policy and technological networks, resulting in a new open access platform for sharing biodiversity data, tools and other products, such as infographics and state of the art analyses.

EU BON facts:

- **EU FP7** collaborative project
- **31 partners** (18 countries)
- **Coordination:** Museum für Naturkunde Berlin, Leibniz Institute for Evolution and Biodiversity Science
- **Project duration:** 54 months; 2012-2017
- **EC contribution:** 9 mio Euro

The European Biodiversity Portal

The European Biodiversity Portal offers EU BON derived products, tools and knowledge and serves as a communication interface between biodiversity researchers, data repositories, interested communities and policy makers. The main goals of the biodiversity portal is to make biodiversity data and information discoverable (Fig.1), accessible and digestible (e.g. by visualising species state and trends, Fig. 2).

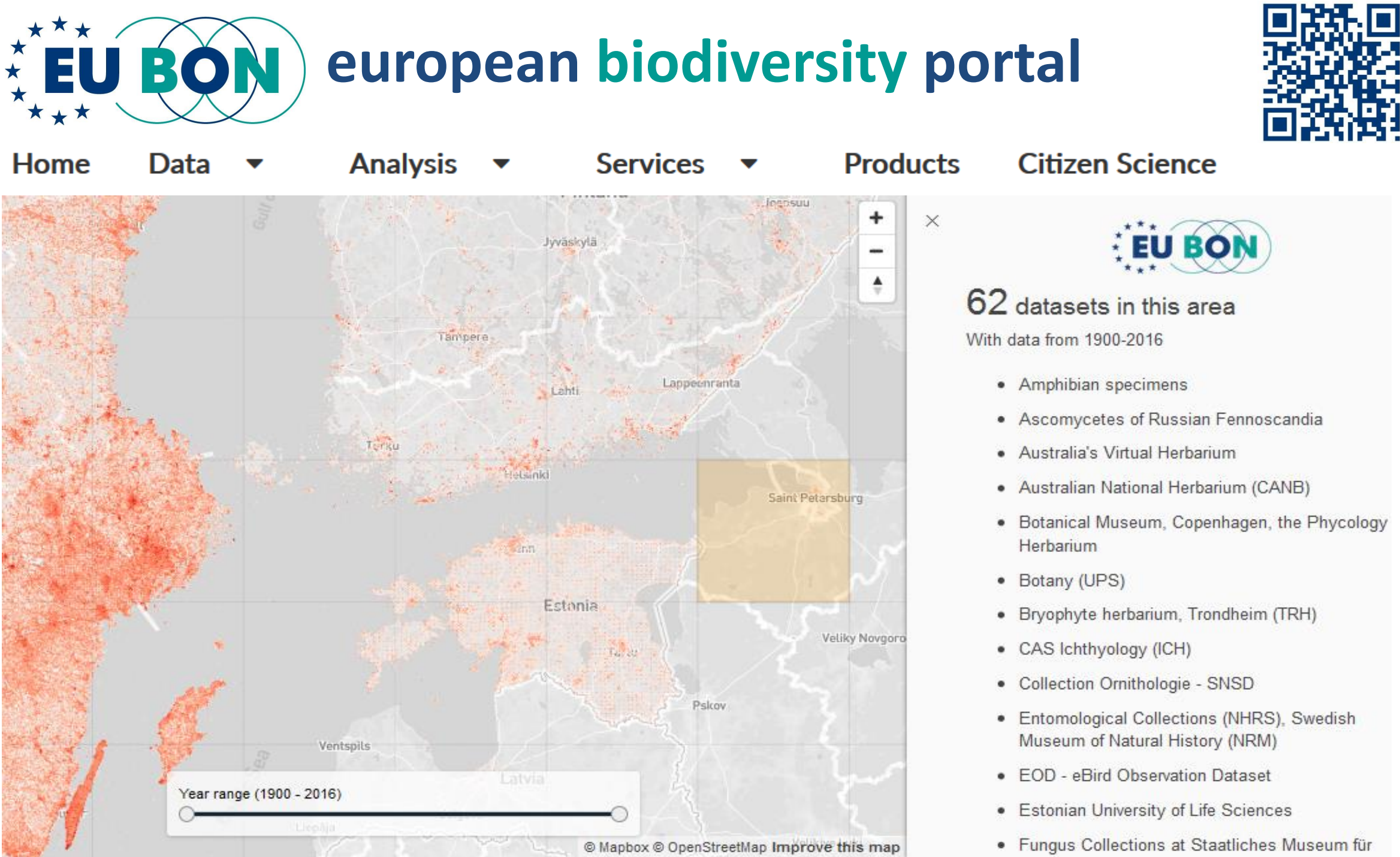


Fig. 1: Spatial Dataset Browser helps to identify and access datasets of interest when generating Essential Biodiversity Variables (EBVs) for species distribution.

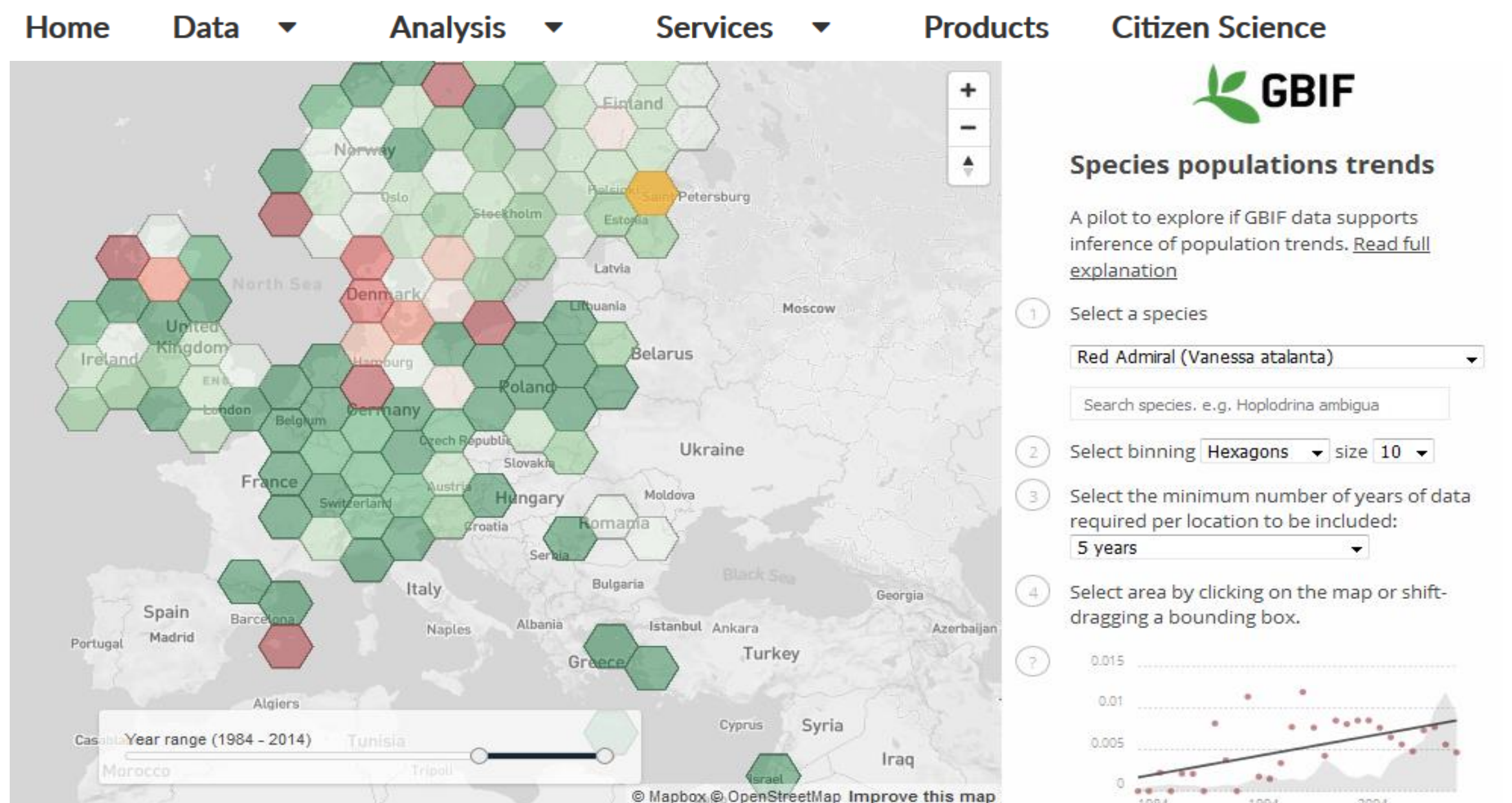


Fig. 2: Species Population Trend Browser helps to analyse species trends in GBIF mediated data. Example: the butterfly species 'Red Admiral' *Vanessa atalanta*, green: increasing populations, red: declining.

References:
 Hoffmann, A., J. Penner, K. Vohland, W. Cramer, R. Doubleday, K. Henle, U. Köljalg, I. Kühn, W.E. Kunin, J.J. Negro, L. Penev, C. Rodriguez, H. Saarenmaa, D.S. Schmeller, P. Stoer, W.J. Sutherland, E. O Tuama, F.T. Wetzel & C.L. Häuser. 2014. The need for an integrated biodiversity policy support process – Building the European contribution to a global Biodiversity Observation Network (EU BON). *Nature Conservation* 6: 49-65. doi: 10.3897/natureconservation.6.6498.
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